

REMARKS

This Amendment is submitted in response to the Examiner's Action mailed April 22, 2005, with a shortened statutory period of three months set to expire July 22, 2005. Claims 1-30 are currently pending. With this amendment, claims 1, 4-7, 9, 11, 14-17, 19, 21, 24-27, and 29 have been amended, and claims 8, 18, and 28 have been canceled.

The Examiner objected to the specification because of an informality stating that the serial number of the co-pending application is missing. Applicant has amended the specification to supply the missing serial number. Therefore, this objection is believed to be overcome and should be withdrawn.

The Examiner rejected claims 7-10, 17-20, and 27-30 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. The claims recite "encrypting...input analog signal". The Examiner stated that it is not clear which analog signal is being encrypted. Applicant has amended claims 7, 17, and 27 and canceled claims 8, 18, and 28. These claims no longer refer to this phrase. Therefore, this rejection is believed to be overcome and should be withdrawn.

Regarding claims 4, 14, and 24, the Examiner stated that since the claims include the term "Java", the claims are indefinite. Claims 4, 14, and 24 have been amended to delete the term "Java" from the claims. Therefore, this rejection is believed to be overcome and should be withdrawn.

Applicant has amended claims 1, 11, and 21 to describe the radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port that is configured to be coupled to a conventional speaker. The radio remains unmodified. Applicant has also amended claims 1, 11, and 21 to describe passing the encrypted input analog signal from the computer system to the microphone port that is included within the unmodified radio. Examples of support for these amendments can be found in the specification on page 6, lines 7-15, page 6, line 24 through page 7, line 7, and page 13, lines 9-17.

Applicant has amended claims 5, 15, and 25 to describe the computer system receiving from the microphone the input analog signal, a microphone driver that is

executing within the computer system converting the input analog signal to a file, the file being in a standard voice file format, the first application constantly monitoring inputs received from the microphone, the first application detecting a receipt of the file, in response to a detection by the first application of the receipt of the file, the first application encrypting the file utilizing a public key that is part of a public key/private key key pair assigned to the computer system, the first application passing the encrypted file to the microphone port that is included within the radio, and transmitting the encrypted file utilizing the unmodified radio. One example of support for these amendments can be found in the specification on page 14, lines 19-30.

Applicant has amended claims 6, 16, and 26 to describe the second radio including a second microphone port that is configured to be coupled to a second conventional microphone and a second speaker port that is configured to be coupled to a second conventional speaker where the second radio remains unmodified. Examples of support for these amendments can be found in the specification on page 6, lines 7-15, page 6, line 24 through page 7, line 7, and page 13, lines 9-17.

Applicant has amended claims 7, 17, and 27 to describe a second application that is executing within the second computer system constantly monitoring outputs from the second speaker port, the second application receiving the encrypted output from the second speaker port, the second application decrypting the encrypted output utilizing public key encryption, and the second application passing the decrypted output from the second application to the second speaker. One example of support for these amendments can be found in the specification on page 15, lines 1-12.

The Examiner rejected claims 1, 5-6, 11, 15-16, 21, and 25-26 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,305,384 issued to *Ashby*. This rejection, as it might be applied to the claims as amended, is respectfully traversed.

Claims 1, 11, and 21 describe encrypting using public key encryption. The term "public key encryption" is commonly understood by those of ordinary skill in the art as including a key pair. Thus, when the input analog signal is encrypted utilizing public key encryption, as described by Applicant's claims, it is encrypted using an encryption algorithm that uses a key pair, and not just a single key.

The Microsoft Computer Dictionary provides the commonly understood definition of the term. The Microsoft Computer Dictionary, Fourth Edition, published in 1999, defines "public key encryption" as "an asymmetric scheme that uses a pair of keys for encryption: the public key encrypts data, and a corresponding secret key decrypts it....See also private key, public key." "Public key encryption" is defined by Applicant, in the specification starting on page 2, line 28 through page 3, line 6, as providing a key pair that is comprised of a private key and a public key. Applicant has used the term "public key encryption" as it is commonly understood by those of ordinary skill in the art.

Regarding claims 2, 12, and 22, the Examiner states that *Ashby* does not disclose a key pair. Because Applicant's claim language implicitly describes a key pair by referring to public key encryption which uses a key pair, *Ashby* does not anticipate Applicant's claims because *Ashby* does not teach encrypting using a key pair.

Applicant has amended claims 1, 11, and 21 to describe the radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port that is configured to be coupled to a conventional speaker. The radio remains unmodified.

Applicant has also amended these claims to describe passing the encrypted input analog signal from the computer system to the microphone port that is included within the unmodified radio.

Regarding original claim 5, the Examiner stated that *Ashby* teaches a microphone port at column 21, lines 42-47. This section of *Ashby* teaches a signal being received within terminal B of block 62 depicted in Figure 2. Applicant understands the Examiner to be referring to terminal B as a microphone port.

Terminal B of *Ashby*, however, is not a microphone port as claimed by Applicant. Applicant claims "a conventional microphone port that is configured to be coupled to a conventional microphone". Terminal B is not such a port. Terminal B is a new tap added to radio 12 that is provided in order to connect device 10 to radio 12. Terminal B is not a conventional microphone port. Terminal B is not configured to be coupled to a conventional microphone. Radio 12 has been modified to add terminal B which is a new tap that is provided on order for radio 12 to be able to receive a signal from device 10.

A microphone 38 is depicted as being coupled to microphone filter limiter mixer 40. Although presumably some type of microphone port exists somewhere between microphone 38 and mixer 40, a microphone port is not taught. A conventional microphone port is not taught.

Further, radio 12 has been modified in order to provide terminal B. *Ashby* states "In Fig. 2, a block diagram is shown of a conventional analog radio 12 having modifications to accommodate device 10." *Ashby* expressly teaches that radio 12 has been modified. Radio 12 has been modified to provide terminals, such as terminal B. Applicant claims the "radio remaining unmodified". *Ashby* describes radio 12 being modified by adding these terminals. Although *Ashby* does state that no component within radio 12 is modified, the transmission lines between components in radio 12 are modified in order to provide these terminals so that radio 12 can communicate with device 10.

Regarding claims 6, 16, and 26, the Examiner states that *Ashby* teaches a speaker port at column 22, lines 37-40 and item 32 of Figure 5. The Examiner states that modem 32 is the speaker port. Applicant claims the speaker port as being included in the radio. Further, Applicant claims the radio being unmodified. In *Ashby*, the modem 32 is not included in radio 12. Modem is part of device 10 and not radio 12 (see Figure 1). Therefore, *Ashby* does not teach an unmodified radio that includes a speaker port.

Because *Ashby* does not teach public key encryption, the radio remaining unmodified, passing the encrypted input analog signal from the computer system to the conventional microphone port, the radio including a conventional microphone port, or the radio including a conventional speaker port, *Ashby* does not anticipate Applicant's claims.

The Examiner rejected claims 2-3, 7-10, 12-13, 17-20, 22-23, and 27-30 under 35 U.S.C. § 103(a) as being unpatentable over *Ashby* in view of Public Key Cryptography, published by *Mohapatra*, Fall 2000, ACM, Volume 7, Issue 1, pages 14-22. This rejection, as it might be applied to the claims as amended, is respectfully traversed.

The Examiner states that *Ashby* does not teach a key pair and uses *Mohapatra* to supply the missing feature. The combination of *Ashby* and *Mohapatra* does not render Applicant's claims unpatentable, because *Mohapatra* does not supply all of the features

that are not taught by *Ashby*. Further, the combination of *Ashby* and *Mohapatra* does not teach the features that are claimed by Applicant.

None of the references, either singly or in combination, teaches public key encryption, the radio remaining unmodified, passing the encrypted input analog signal from the computer system to the conventional microphone port, the radio including a conventional microphone port, or the radio including a conventional speaker port.

The Examiner rejected claims 4, 14, and 24 under 35 U.S.C. § 103(a) as being unpatentable over *Ashby* in view of U.S. Patent 6,169,805 issued to *Dunn*. This rejection, as it might be applied to the claims as amended, is respectfully traversed.

The Examiner states that *Ashby* does not teach a Java application to perform the steps and uses *Dunn* to supply this feature missing from *Ashby*.

Applicant has amended the claims to remove the reference to "Java". These claims now describe a first application receiving the input analog sign from the microphone, the first application encrypting the signal using public key encryption, and passing the encrypted signal from the first application to the microphone port of the unmodified radio. As discussed above, *Ashby* does not teach public key encryption, passing the encrypted signal to a microphone port, or an unmodified radio. The references, *Ashby* and *Dunn*, either singly or in combination, do not describe, teach, or suggest public key encryption, passing the encrypted signal to a microphone port, or an unmodified radio.

Applicant has amended claims 5, 15, and 25 to describe a microphone driver converting the input analog signal received from the microphone to a file where the file is in a standard voice file format. The first application constantly monitors inputs received from the microphone. The first application detects a receipt of the file. In response to this detection, the first application encrypts the file using the computer system's public key, passes the encrypted file to the microphone port, and then the unmodified radio transmits the encrypted file.

None of the cited references, either singly or in combination, describe the combination of features now claimed in claims 5, 15, and 25.

Applicant has amended claims 6, 16, and 26 to describe a second radio that includes a second conventional microphone port and a second convention speaker port,

where the second conventional radio remains unmodified. A second computer system receives an encrypted output from the second speaker port that is included within the unmodified second radio. The second radio decrypts the encrypted output utilizing public key encryption which those of ordinary skill in the art understands as including a key pair. The second computer system then outputs the decrypted output from the second speaker.

None of the cited references, either singly or in combination, describe the combination of features now claimed in claims 6, 16, and 26.

Applicant has amended claims 7, 17, and 27 to describe a second application that is executing within the second computer system constantly monitoring outputs from the second speaker port. The second application receives the encrypted output from the second speaker port. The second application decrypts the encrypted output utilizing public key encryption. The second application then passes the decrypted output from the second application to the second speaker.

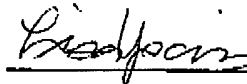
None of the cited references, either singly or in combination, describe the combination of features now claimed in claims 7, 17, and 27.

None of the references describe, teach, or suggest the combination of features now claimed by Applicant. Therefore, for the reasons given above, Applicant believes the claims are patentable over the cited prior art. Further, because the remaining claims depend from the claims discussed above, the remaining claims are believed to be patentable for the reasons given above.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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